



Fact sheet: 09/17/2016



The Mirabeau Water Garden will become a public asset, destination, and environmental classroom that will enhance and protect the neighborhood

### **OVERVIEW**

Located between Bayou St. John and the London Avenue Canal in the Filmore neighborhood in Gentilly, the Mirabeau Water Garden is a public works project that will transform a 25-acre empty site into a recreational and educational amenity.

The land was donated to the City of New Orleans by the Congregation of St. Joseph on the condition that it be used to enhance and protect the neighborhood.

The water garden vision is based on innovative site design and stormwater management features developed in the *Greater New Orleans Urban Water Plan*. This vision was embraced by the Sisters of St. Joseph as one that, in their own words, "would manifest the holiness and the beauty of this land... and evoke a huge systemic shift in the way humans relate with water and land."

Design plans are currently in progress, with construction estimated to begin in the summer of 2018 and be completed by the summer of 2019.

# **FUNDING & PARTNERS**

The city has secured \$12.5 million dollars in federal funding from FEMA through the Hazard Mitigation Grant Program (HMGP). The project will also receive additional federal funding through the recent award from the US Department of Housing and Urban Development (HUD)'s National Disaster Resilience Competition (NDRC), in an amount that is yet to be determined and is subject to the city's negotiation with HUD.

FEMA HMGP funds are to be used solely for hazard mitigation. This project will use FEMA funds to reduce flood risk from intense rainfall events by relieving pressure on the current drainage system in and around the Filmore neighborhood.

The HUD funds to be invested in this project will be used to enhance landscape design and support programmatic features such as educational or recreational amenities that will be developed through further discussions between the city and the community.

The city is currently in discussion with potential partners to manage the site after construction, including operations, maintenance, and site usage by other entities.

#### ISSUES TO BE ADDRESSED

FLOODING - excess water the drainage system cannot handle

- New Orleans receives on average 60 inches of rainfall per year
- The drainage system can handle one inch of rain the first hour and one-half inch thereafter
- · Rainfall at greater rates causes flooding

SUBSIDENCE - sinking of the land caused by dry organic soils

- Low-lying areas are former marshlands with organic (highly porous) soils that need water to remain stable
- Pumping drains soils of water causing them to shrink like a sponge and swell again when it rains
- This shrink-swell effect causes differential movement and damages streets and building foundations



Vision of Gentilly Resilience District as proposed for National Disaster Resilience Competition

## **DESIGN OBJECTIVES**

**DIVERT** and temporarily store

**INFILTRATE** water into the

**CLEAN** water of pollutants

**EDUCATE** by demonstrating



Constructed filtration wetlands designed to cleanse water of pollutants and improve water quality

up to 10 million gallons of water from street drainage pipes into a site detention pond to mitigate flooding site's sand layer to allow organic soils to stabilize and limit subsidence through a series of constructed filtration wetlands to improve water quality and allow visitor interaction how natural processes can be utilized for more sustainable water management and local ecology

## **BENEFITS**

The Mirabeau Water Garden will become a public asset, destination, and environmental classroom. The community will be able to see and learn, through interactive features, how the site functions and is part of an integrated water management system that benefits the surrounding area by taking flood waters away from streets and homes and storing them in the landscape.

Once completed, the project should benefit nearby residents by not only reducing flood risk but by increasing property values, providing a recreational amenity, a community gathering space, and reducing the risk of soil

subsidence in the area.

This project is a key component of the city's larger vision for a Gentilly Resilience District that, in addition to other large sites like Mirabeau, includes stormwater storage in streets and medians of major boulevards that fit into a network of green (or nature-based) infrastructure, that complements the traditional drainage system of pipes and pumps. Combined, these interventions can transform the character of the district, improving its urban identity and promoting new economic development.

For more information, contact Charles Allen at <a href="mailto:ceallen@nola.gov">ceallen@nola.gov</a> or (504) 658-2215